REMARKS

Claims 1-34 are pending in the application and stand rejected.

Objections to the specification

The Examiner objects that the specification contains embedded hyperlinks, and requests that these hyperlinks be removed. The Examiner has invited Applicants' attention to MPEP §608.01, wherein Applicants learned that "[w]here the hyperlinks and/or other forms of browser-executable codes themselves rather than the contents of the site to which the hyperlinks are directed are part of applicant's invention and it is necessary to have them included in the patent application in order to comply with the requirements of 35 U.S.C. §112, first paragraph, and applicant does not intend to have these hyperlinks be active links, examiners should not object to these hyperlinks. The Office will disable these hyperlinks when preparing the text to be loaded onto the USPTO web database." (emphasis added)

Applicants note that all instances of URLs in the specification noted by the Examiner are clearly not intended to be active hyperlinks, and are not provided in order to incorporate the contents of the sites to which they are directed into Applicant's invention. Rather, the URLs in the sections identified by the Examiner are either intended to provide background material to help the reader (i.e. "the W3C standards for the RDF") or are completely *hypothetical* URLs provided as part of examples of the operation of the claimed inventions. Applicants thus submit that these URLs are all provided to comply with the requirements of 35 U.S.C. §112 and respectfully request that the Examiner withdraw this objection.

Rejection under 35 U.S.C §102

Claims 1-34 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Publication No. 2006/0265489 to Moore. In particular, the Examiner finds that, with regard to claims 1 and 26, Moore discloses all of the claimed limitations and specifically alleges that Moore discloses serializing each of multiple statements in ¶[0146]; using a digital processor to independently compute a hash value for each of the multiple statements in ¶[0335]; and applying

a commutative function to each hash value, to obtain an aggregate hash value representing all of the multiple statements in ¶[0354]. Applicants respectfully disagree.

Moore's ¶[0146] teaches that:

> The selection of the best available route between two nodes on a network may be done using an algorithm, such as the Dijkstra shortest path algorithm. In this algorithm, an OPML router, based on information that has been collected from other OPML routers, builds a graph of the network. This graph shows the location of OPML routers in the network and their links to each other. Every link is labeled with a number called the weight or cost. This number is a function of delay time, average traffic, and sometimes simply the number of disparate links between nodes. For example, if there are two links between a node and a destination, the OPML router chooses the link with the lowest weight.

Applicants can only guess that the Examiner views a "graph [that] shows the location of OPML routers in the network and their links to each other" as disclosing serializing. Serializing, as unequivocally understood by all those skilled in computer science, refers to the conversion of an object instance (shapes, pictures, software entities) to a data stream of byte values in order to prepare it for transmission (definition obtained from www.webopedia.com, an on-line computer science dictionary). Moore, on the other hand, simply discloses building a graph of the connections among a group of networked routers and then assigning a value to each such link indicative of its desirability for use to convey data between two such routers. Applicants simply do not see anything in common between Moore's network links graph and the presently claimed serializing each of multiple statements. Even if Moore's links are viewed as descriptive statements, there is still nothing in the cited paragraph nor anywhere else in Moore for that matter that can be understood as teaching the serialization of these links.

The Examiner next cites to ¶ [0335], which teaches that:

> A filter may be associated with an analog-to-digital converter (ADC), a digital-to-analog converter (DAC), or a media coder/decoder (CODEC), referred to generally as digital processors. In one embodiment, characterizations of output such as sampling rate, compression ratios, frequency spectra, and the like may be provided to

> a feed for transmission and processing along with the digital content. In another aspect, a data feed may be provided to guide downstream processing of the digital (or analog) signal. A filter may be applied to sort, select, block, or otherwise process associated media according to the data feed.

The Examiner relies upon this paragraph as allegedly anticipating the claimed using a digital processor to independently compute a hash value for each of the multiple statements, and Applicants once again respectfully submit that this is simply not so. "Otherwise process associated media" with "digital processors" is a rather broad statement but even so those skilled in the art would understand that, by the mention of ADCs and DACs, Moore is essentially referring to digitizing content. The mention of filtering such digital content also has no bearing whatsoever upon the claimed using a digital processor to independently compute a hash value for each of multiple statements after serializing them.

Applicants have reviewed the entire Moore reference and have found essentially only two mentions of hash functions: (1) "a message may include one or more digital signatures, which may be authenticated with reference to, for example, the message contents, or a hash or other digest thereof, in combination with a public key for the purported author. Conversely, a recipient of a digitally signed item may verify authenticity with reference to the message contents, or a hash or other digest version thereof, in combination with a private key of the recipient."; and (2) "In a server used with the systems described herein, the entire universe of known data feeds may be hashed or otherwise organized into searchable form in real time or near real time. The hash index may include each word or other symbol and any data necessary to locate it in a stream and in a post." Neither of these statements anticipate the claimed using a digital processor to independently compute a hash value for each of multiple statements after serializing them, nor do they in any way cure the aforementioned deficiency regarding serializing each of multiple statements. Furthermore, there is also no connection whatsoever drawn by Moore between the graph of network links described in ¶[0146] and the filtering of digital content described in ¶ [0335], and thus besides lacking any of the alleged claimed limitations, these passages are also not at all connected in the manner that the Examiner attempts to combine them.

Finally, the Examiner cites to ¶ [0354] as teaching applying a commutative function to each hash value, to obtain an aggregate hash value representing all of the multiple statements. This passage reads:

> The semiconductor device 1300 may be adapted to receive a data feed, and transmit the collected information to a computer, a server, a hard disk, a CD, a DVD, a Flash memory or a web-capable device. The semiconductor device 1300 may also, or instead, be adapted to process syndicated content, such as by aggregating a plurality of feeds, filtering or otherwise processing feed content, encrypting or decrypting syndicated content, formatting syndicated content for display, or more generally providing any of the services or functions associated with the conceptual syndication framework described above with reference to, e.g., FIG. 4. The semiconductor device 1300 may also, or instead be adapted to publish a data feed in a suitable syndication format, which may be a data feed processed as generally described above. The semiconductor device 1300 may be a web-capable device adapted to interact with the Web by receiving and transmitting information using, e.g., HTTP or other web-based protocols. The information received and transmitted by the semiconductor device 1300 may be RSS, OPML, or any other outlining, syndication, or data streaming formats or technologies described herein, whether based upon XML or upon some other syntax or protocol, all of which are periodically referred to herein as RSS for purposes of convenience only, and not by way of limitation.

Once again, Applicants are forced to guess that the Examiner views the disclosed "aggregating a plurality of feeds" as reading upon applying a commutative function to each hash value, and are compelled to disagree. First, Applicants note that this passage is equally as disconnected from the teachings of the other two passages as those are from each other, as there is no connection between the data feeds discussed in this passage, the network links in ¶[0146], and the filtering of digital data content in ¶ [0335]. Moreover, Applicants submit that whereas "aggregating" could be viewed as summing, which is indeed a commutative function, "aggregating a plurality of data feeds" in no way anticipates "applying a commutative function to each hash value, to obtain an aggregate hash value representing all of the multiple statements" wherein each hash value has been independently computed for a serialized statement.

Applicants respectfully submit that the Examiner has failed to appreciate the scope of their claimed invention, which is essentially directed to a novel algorithm for processing descriptive statements which in the aggregate form a "graph," which method allows the graph to be transmitted together or in discrete parts, each of which may be de-serialized and re-serialized in a different order along the way, and the contents of which may still be verified upon receipt by use of the claimed hash function. This is accomplished by the novel claimed algorithm through the independent serializing and hashing of each statement in the graph followed by the combination of all of the individual hashes with a commutative function. Each of the disparate elements of the algorithm are certainly known to those of skill in the art, but the novel way in which Applicants' algorithm combines these steps is certainly new and nonobvious. The current methodology for serializing a graph, as known by the skilled persons, entails serializing the entire graph, computing a hash for the serialization that is entirely dependent upon the particular order of the serialization of the graph statements, transmitting that particular serialization, and verifying its contents with the hash value. The Examiner will likely appreciate the flexibility and robustness afforded by Applicants' novel methodology.

In light of the above, Applicants respectfully submit that claim 1 is in fact novel and nonobvious over the art on record, and respectfully request the Examiner to kindly reconsider and pass claim 1 to issue.

Applicants further submit that the above discussion is equally probative of the novelty and nonobviousness of independent claims 12, 16, 21, 26, 29, and 33 because of the lack of anticipation in Moore of the various claimed limitations. Applicants thus respectfully submit that claims 12, 16, 21, 26, 29, and 33 are likewise novel and nonobvious over the art on record for the same reasons advanced above.

Claims 2-11, 13-15, 17-20, 22-25, 27-28, 30-32 and 34 depend variously from claims 12, 16, 21, 26, 29, and 33. Thus, Applicants respectfully submit that claims 2-11, 13-15, 17-20, 22-25, 27-28, 30-32 and 34 are likewise novel and nonobvious over the art on record at least by virtue of their dependencies.

* * *

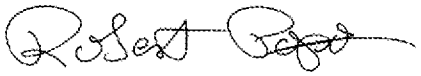
In view of the above, Applicants submit that the application is now in condition for allowance and respectfully urge the Examiner to pass this case to issue.

The Commissioner is authorized to charge any additional fees which may be required or credit overpayment to deposit account no. 08-2025. In particular, if this response is not timely filed, the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136(a) requesting an extension of time of the number of months necessary to make this response timely filed and the petition fee due in connection therewith may be charged to deposit account no. 08-2025.

I hereby certify that this document is being transmitted to the Patent and Trademark Office via electronic filing.

August 16, 2007
(Date of Transmission)

Respectfully submitted,



Robert Popa
Attorney for Applicants
Reg. No. 43,010
(323) 934-2300 voice
(323) 934-0202 facsimile
rpopa@la.ladas.com